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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,966	02/15/2002	Ruban Kanapathippillai	42P14045	1460
8791	7590	09/21/2004	EXAMINER	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			NGUYEN, VIET Q	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,966

Applicant(s)

KANAPATHIPPILLAI ET AL.

Examiner

Viet Q Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment/Remarks filed on 07/06/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 10-18, 22-28, 31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-18, 22-28, 31-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1-6, 10-18, 22-28, and 31-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kanapathipillai et al (Publication No. US 2003/0056134 A1)**.

In regard to claims **1-6 and 13-18**, Kanapathipillai et al (see Fig. 37) clearly shows a memory access structure which includes a right memory array (3604R), a left memory array (3604L), a plurality of row lines and columns existed in each array, and an off-boundary row address decoder (3602) coupled to both arrays (in between) so to perform an off boundary memory access. Note that page 35 (see paragraph [0383]) stated that such off boundary access avoids the need of two access cycles thus inherently suggests the claimed "within one memory access cycle". Further, page 36 (or [391]) stated that the off boundary access receives the start address and a sequence number to access those left and right memory arrows. Also, Fig. 36 shows that such "off boundary memory decoder" (3602) is coupled between both left and right memory arrays (3604L, 3604R). Particularly, Fig.39 also shows that said "off boundary decoder" (3602) comprises of a plurality of row decoders (3905) such that each row decoder (3905) coupled

to a respective left and right memory row of a row line (RWL), each row decoder to decode an address (start address + a sequence #) to access the desired plurality of memory addresses data within the respective left and right memory row of the row line, and wherein each row decoder (3905) is coupled to at least one adjacent row decoder by a multiplexer (3908). Finally, the claimed "signal processors" or "signal processing units" to be used with such of boundary accessing circuitry are also seen in Figs.1-2 as "core processor."

In regard to claims **10-12 and 22-24**, page 38 (see paragraph [0414]) teaches the use of "off-boundary detector" in response to the starting address and a sequence number, and the off boundary detector generates an "off boundary signal" to control the multiplexers.


In regard to claims **25-28 and 31-32**, the method steps of performing the "boundary access addressing" and/or decoding such addresses, to be used in conjunction with the recited structure of claims 1 above, are considered as inherent support by such suggested structure, and thus these claimed steps are also obviously taught by this same reference.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Q Nguyen whose telephone number is (571) 272-1788. The examiner can normally be reached on 7am-6pm (EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (703) 308-4910. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


V. Nguyen
09/16/2004

Viet Q Nguyen
Primary Examiner
Art Unit 2818

